

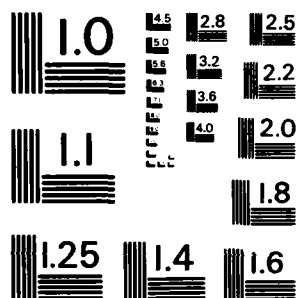
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Motivation and Politics in
Executive Compensation

Gerardo R. Ungson and Richard M. Steers
Graduate School of Management
University of Oregon

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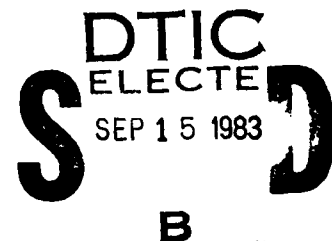
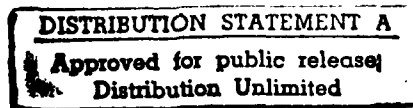
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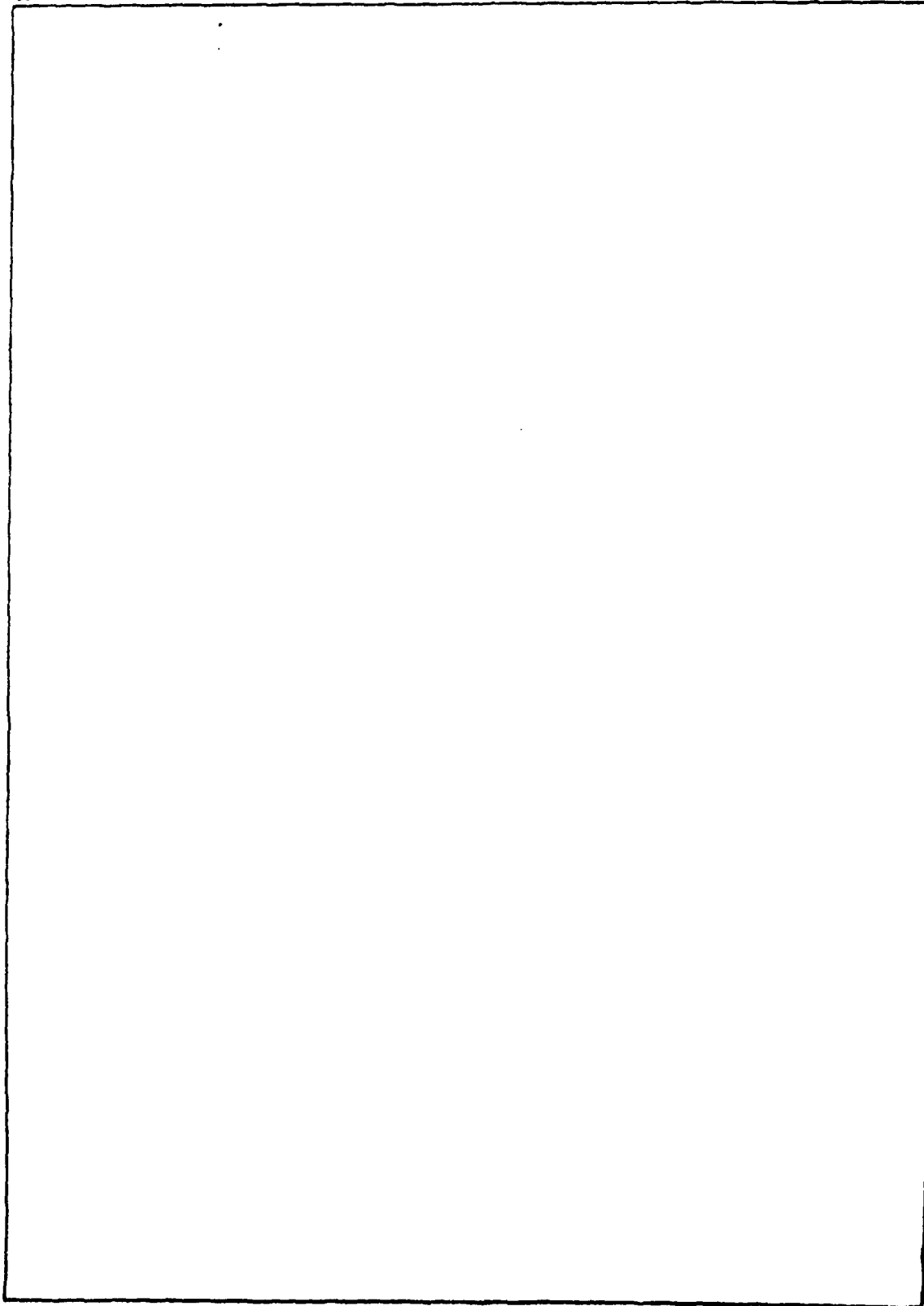
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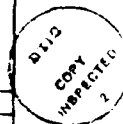
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Motivation and Politics in Executive Compensation

Abstract

For the past thirty years, economists and management theorists have empirically investigated the compensation of top executives. An issue that has received critical attention is what appears to be a weak link between top executive compensation and executive performance. In contrast to rational models that have characterized most previous studies, this paper develops a political perspective to explain why the linkage between rewards and performance is weak. Implications for research and management practice are presented.

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Consider the following examples:

- In 1981, International Telephone and Telegraph (ITT) had an average return on stockholders equity of 11%, an annual growth rate in earnings per share of 3.5%, and a change in the price of their common stock of -12%. During the same time, the comparable figures for the Raytheon Corporation were 2.7%, 24.1%, and +147%. Even so, ITT's president was paid \$1,150,000 (including a \$133,000 pay raise), while Raytheon's CEO received \$635,000 (Loomis, 1982).
- Texaco's CEO earned approximately \$1,000,000 in 1981 (including bonuses), the third highest income in the industry, despite the fact that "among large oil companies Texaco's performance has in the last decade been lousy." (Loomis, 1982).
- During the recent acquisition battle between Bendix, Martin Marietta, and United Technologies, the Bendix Board of Directors voted themselves and their president major severance pay packages (amounting to \$4.0 million for the president alone) in case their company lost the acquisition battle (Morrison, 1982).

What do these examples have in common? Each represents a real-life example of top corporate executives being rewarded based on criteria that are not strongly related to corporate performance and accountability. In the first example, CEO income appears to be more a function of the size of the organization rather than actual performance. The second example suggests that CEO income is inversely related to firm performance. In the third case, we see an example of the establishment of a major protective cushion (i.e., reward) to be paid in the event of failure, not success.

Why do such seemingly inequitable examples occur in contemporary corporations? Are such examples commonplace among top executives across organizations? What might explain the weak relationship between corporate performance and CEO compensation? What are some implications of such a relationship for improving current practices of rewarding senior executives in organizations? To answer these questions, we intend here to examine the available empirical literature on correlates of executive compensation. Based on this analysis, the role of motivation and politics in determining such compensation will be discussed.

Motivational Assumptions About CEO Compensation

The literature on employee motivation is both considerable and complex. Even so, certain conclusions following from this literature seem to have received fairly general consensus (Lawler, 1973; Steers and Porter, 1983). In particular, most theories of motivation argue in favor of strong performance-reward contingencies. For example, in cognitive theories such as expectancy/valence theory, it is suggested that performance is enhanced when employees see performance as leading to desired rewards. On the other hand, non-cognitive theories, such as reinforcement theories, argue that rewards like pay raises, bonuses, or even praise for a job well done often serve as conditioned reinforcers when tied to performance. Hence, whichever model is used, the motivational assumptions underlying executive compensation are clear: tie rewards to desired performance in order to ensure maximum performance.

When we examine rewards at the CEO level, desired performance is typically viewed in terms of profitability (return on equity or return on in-

vestment) or market share. Hence, while we would clearly not expect a direct link between these two variables (there is only so much a CEO can do to influence corporate performance), we would expect to see CEO rewards tied at least in part to how well the company is doing.

Unfortunately, available research evidence is equivocal on the question of whether executive compensation is closely related to company performance. Most research studies have attempted to test for the relationship between company performance (e.g., profitability), firm size, and CEO compensation, and these studies have yielded mixed results. There are others who argue that the emphasis on profitability has encouraged a short-term rather than a long-term strategic orientation that is regarded by some as a major cause of our declining competitive position in world markets (Murthy and Salter, 1975; Stonich, 1981). A common example is the reduced investments in research and development which are attributed to reward systems that favor short-run profitability and penalize long-term investment (Rappaport, 1978).

To remedy the situation, many writers have suggested ways to more closely integrate performance and rewards at both the corporate and divisional manager levels. While there is obvious merit to integrating rewards with performance, we would argue that the role of the chief executive is more complex than has been assumed in many prior studies of executive compensation, and that a recognition of these complexities could modify the prescribed ways in which performance and rewards should be related. The complexity of the CEO role arises principally from political and strategic interactions with organizational constituencies, such as political groups, government regulatory agencies, competitors, and others -- interactions

that are not easily quantifiable or tied to CEO performance and compensation. As a result, it is suggested here that the political/strategic processes surrounding the CEO's position must be recognized and accounted for in any comprehensive attempt to understand and design effective CEO reward systems.

Determinants of CEO Compensation: The Empirical Evidence

Sales vs. Profit Maximization

Early research on the determinants of top executive compensation was undertaken by economists interested in examining hypotheses derived from the traditional theory of the firm that top managers operate to maximize profits. At this time, it was contended that executive compensation (e.g., salary and bonus) would be closely linked with profitability. To recognize elements of oligopolistic competition, an alternative hypothesis was introduced that compensation would be more closely related to sales revenue subject to a minimum profit constraint (Baumol, 1958, 1967).

In one of the first tests of the model, Roberts (1959) examined a sample of 1,414 firms for the 1935-1950 period and reported that CEO compensation was primarily related to size (sales volume), not profits. McGuire, Chiu, and Elbing (1962) conducted a follow-up study of 45 firms for each of the seven years, 1953-59, and found that CEO income (e.g., bonus, salary, and stock options) was primarily related to sales rather than to profits. After testing for possible lagged relationships in which similar findings were observed, they interpreted their overall results as supporting Roberts' (1959) earlier study.

Noting the high colinearity between sales and profits, Lewellen and Huntsman (1970) measured compensation, sales, and profits relative to the firm's assets for 50 firms over a 21-year period, 1942-1963. They reported that profitability had more significance for CEO compensation when compared to sales efficiency. Prasad (1974) utilized this same weighted index in analyzing 823 firms in different industries, and employed group rather than individual remuneration as a measure of compensation. His findings are supportive of Lewellen and Huntsman (1970) — that is, profitability emerged as a more potent influence on group executive compensation. Prasad did note, however, that sales efficiency also had a sizable influence. Smythe, Boyes, and Pesean (1975) replicated prior studies using executive compensation data for 1971 and reported that both sales efficiency and profitability influenced CEO compensation.

More recently, Deckop and Mahoney (1982) have argued that the measurement of sales, profits, and compensation relative to assets virtually eliminates any size effect for compensation making interpretations about the relative effects of size and profits on compensation difficult. By dividing sales by assets, for example, the resulting measure is one of efficiency, e.g., the amount of sales generated for every dollar of assets, and not size. A recent study by Ciscel and Carroll (1980) attempted to circumvent this problem by first regressing profits upon sales and calculating a residual profit score by subtracting predicted profits from observed profits. Next, they regressed CEO compensation against residual profit and sales. Using this method, they found that sales (or size effect) were predominant, although they also concluded that market variables (i.e., the size of their intercept variable) were a better predictor of CEO compensation.

Potential Moderating Variables

Other studies have attempted to introduce variables that might moderate the relationship between CEO compensation and rewards. The first of these variables was the influence of owner control and the degree of industry concentration (e.g., market share of either 4 or 8 industry leaders). Wallace (1973) examined the determinants of CEO compensation in both owner controlled/low concentrated and non-owner controlled/high concentrated industries. While size (sales or assets) appeared to be the primary predictor of CEO compensation in general, Wallace also noted that profitability was a better predictor among owner controlled firms in low concentrated industries.

An additional potential moderator variable is that of corporate strategy. Using Rumelt's (1974) classification, Murthy and Salter (1975) identified firms as single/dominant product (70% or more of business is within the primary business), related product (up to 70% is within the primary industry, the remainder being related to it in terms of skill or resource), and unrelated product (up to 70% is within the primary product, the remainder not being related to it in any significant way). In this study, Murthy and Salter (1975) reported that low correlations between CEO pay and financial performance are found in companies with one dominant product (e.g., U. S. Steel, Alcoa, and International Paper), but that link appears much stronger in companies pursuing a variety of unrelated products (e.g., ITT, Textron, and FMC). Murthy and Salter have interpreted this finding as arising from the changing role of the CEO. In particular, as the degree of a company's product market diversity increases (e.g., a firm moves to more unrelated products), the CEO's role shifts from the details of actually managing

individual products to the more remote position of allocating financial resources to them. In this context, the financial measures of performance of the separate product areas or divisions become the basis for evaluating investment opportunities and eventually for rewarding executive personnel. As executives at the corporate level start evaluating operating divisions according to certain financial criteria, it is just a matter of time before these executives become evaluated on a similar basis. Therefore, while top executive compensation fluctuates more widely in unrelated product areas, reward structures are tied more closely to changes in profit performance.

Empirical work on the compensation of divisional general managers, while not focused directly at the CEO level, nonetheless provides some additional insights into the economics of CEO compensation. Berg's work (1969, 1973) on conglomerates and diversified firms suggests that differences in rewards systems can be explained in terms of the autonomy of divisional managers. For example, reward structures for divisional managers would depend on the extent to which they have full control over elements that determine divisional profitability (i.e., sales, costs), or the degree to which they share these elements with other divisions. Following this line of reasoning, Pitts (1974) tested the hypothesis that reward structures (i.e., components of bonus programs) would differ significantly between firms that grew principally by internal expansion and those that grew principally by external acquisitions. He noted that the characteristics of bonus systems for divisional managers in externally-acquired conglomerates were more quantitative, were more closely linked with divisional profitability (ROI), and had a wider range between the highest and the lowest paid divisional manager.

Pitts explained these differences in terms of the level of autonomy associated with growth strategies. Divisional managers in externally-acquired conglomerates generally experience more autonomy than their counterparts in internally-acquired conglomerates and consequently are better able to link their rewards (bonus) to their own performance (ROI). Divisional managers in internally-acquired conglomerates are not as autonomous since they have to share resources and technologies with one another. Therefore, rewards (bonus) are based on both divisional ROI as well as overall corporate performance. In addition, interdivisional boundary transactions that are essential to effective resource-sharing are not as easily quantified in evaluation terms which explain the prevalence of qualitative criteria in bonuses of these divisional managers.

Evaluating the Evidence: Unresolved Issues

A systematic review of the empirical research reviewed here is somewhat difficult due to the diversity of samples, time periods, conceptualizations, and operationalizations of the key variables. In the cross-sectional studies such as those described earlier, it is not at all surprising that size (sales) often explains the differences in CEO compensation. Since CEO pay levels are often based on comparative pay surveys (Kraus, 1970), it is intuitively clear that pay would covary to some extent with size — regardless of performance. Moreover, since size also often reflects the complexities and demands of the job, it can be argued that CEOs in larger firms should be more substantially compensated.

Still, the question of whether CEO compensation is linked with profitability has remained unresolved. While it can be argued based on the above

review that CEO compensation is at times related to profitability for firms in a given size, it is more difficult to interpret the relative effects of size and profitability on CEO rewards (Deckop and Mahoney, 1982). Nonetheless, there appears to be sufficient evidence to suggest that profitability can have a significant impact on CEO compensation when size differences are controlled or when longitudinal analyses are performed (Deckop and Mahoney, 1982).

Using a more restricted focus, studies by Berg (1969, 1973) and Pitts (1974) suggest that the level of managerial autonomy, as reflected in a firm's corporate strategy, might account for the differential components of a divisional manager's bonus. Whether this pattern is true for CEOs remains another question that has to be addressed in future studies. In fact, the possible parallels between the role of CEOs and divisional managers in diversified companies provide a point of departure for speculating on the lack of congruence between CEO rewards and performance.

Politics at the CEO Level: The Missing Link?

An implicit assumption underlying theories that prescribe a strong link between top executive rewards and performance is that of functional rationality, i.e., the presumption that corporate events typically represent purposeful choices of consistent actors (Allison, 1971). As behavior is assumed to reflect purpose or intention, it is then presupposed that high rewards (such as bonuses or high salaries) should be positively associated with the accomplishment of predefined goals (e.g., profitability). Pfeffer (1981) has criticized models of rational choice as failing to take account of the diversity of goals and interests within organizations. The diversity of goals

reflects the pluralistic nature of organizations, that is, organizational subunits, coalitions, and subcultures with different, if not conflicting, interests. Therefore, actions and decisions result from bargaining and compromise, with those units with the greatest power receiving the greatest rewards from the interplay of organizational politics. In applying this model in the context of CEO compensation, it is necessary to understand the complexities of the CEO role, and how these complexities are related to CEO compensation. Three perspectives are suggested in this regard: (1) the CEO as a political figurehead; (2) the CEO as a political strategist; and (3) the CEO and executive succession.

The CEO As A Political Figurehead

In an instructive study of how managers deviate from roles ascribed to them by classical management theory, Mintzberg (1973) suggests that managers spend considerable time acting as figureheads for their organizations. Specifically, as legal authorities of their firms, managers act as symbols and are obliged to perform symbolic activities, such as attending ceremonial events, political functions, receiving important visitors, and so forth. In a broader context, the top manager often acts as a boundary-spanner to owners, government, employee groups, and the general public. They make their preferences known to the CEO who, in turn, is obliged to effectively transmit the company position to them. Weick (1979) describes managerial work as managing myths, symbols, and images, and argues that managers should be viewed more as evangelists than accountants. Pondy (1978) also noted that a large part of leadership and power derives from the manager's ability to manage symbolic activity.

These examples illustrate the importance of political figurehead roles and symbolic functions to the CEO job. In terms of executive compensation, these political/symbolic activities are difficult to evaluate since they are not always clear and criteria for evaluating success in these activities are often equivocal.

The CEO As A Political Strategist

In contrast to rational choice and bureaucratic models of organization, the political model emphasizes the role of coalitions and transactions between these coalitions with external constituencies (Cyert and March, 1963; Allison, 1971). In this context, the CEO assumes the role of a political strategist who is active in managing not only political coalitions within the organization but external constituencies as well. Pfeffer's work on cooptation (1972; 1974) provides one example on how top managers deal with adverse environmental conditions by including outside members (or adversaries) as part of the organizational boundaries (e.g., Board of Directors) in an effort to "win" these members to the company's position.

The political and strategic roles of the CEO are perhaps no better dramatized than in maneuverings that characterize mergers and acquisitions. As one example, William Agee, the Chairman of Bendix Corporation, made a \$1.5 billion bid for Martin Marietta Corporation, regarded as one of the fastest growing defense contractors. Martin Marietta's management responded with a range of defensive tactics that included a search for another buyer, a counter offer to buy Bendix, and a move to buy an ailing cement company to lessen its appeal to Bendix. United Technologies came to Marietta's side by offering to buy Bendix and to split Bendix's assets with Marietta. In the end,

Allied Corporation came to the rescue of Bendix and purchased Bendix itself, a move that saved face for Bendix and its managers and prevented them from completely losing in a battle they themselves began (Rowan and Moore, 1982).

This particular episode illustrates the difficulty in evaluating the strategic and political skills of the individuals involved. There are those who have praised Agee's investment strategy, but have been critical of his judgments and dealings with the Marietta board of directors. Specifically, his decision to include his wife, Mary Cunningham (not affiliated with Bendix), as part of his entourage to a critical meeting with the Marietta board was considered to be a poor political maneuver that offended a conservative Marietta board (Wall Street Journal, September 24, 1982). On the other hand, the Martin Marietta management managed to keep their company from a Bendix takeover at the expense of an additional \$892.5 million debt for the company. Evaluating the performance of Agee and the Marietta board would be difficult when viewed against what appears to be in the best interests of the companies and stockholders.

CEO and Executive Succession

Pfeffer (1981) has argued that the choice of a CEO has significant symbolic importance and consequences for the decisions the organization has to make in the future. This is particularly evident in the choice of an inside or an outside successor to the CEO. As Carlson (1962) reported in a study of school supervisors, outside successors are usually hired to accomplish changes and are less associated with previous decisions of the company. This is confirmed in part by Helmich and Brown (1972) who observed that there are less changes in the executive role constellation among organizations experiencing inside succession as opposed to those facing outside succession.

What appears less dramatic, perhaps as data are not always available, is the economics of executive succession. In other words, the hiring of a CEO often generates a host of questions on how much the CEO is to be paid, in what manner, and the general expectations the board of directors might have of the new appointee. These decisions are often complex and may be related to internal politics as well as the qualifications of the incoming CEO.

A case in point was the appointment of Archie McCardell to International Harvester. McCardell's package included \$1.5 million in up-front money, along with an \$800,000 salary and bonus package. Also included was an incentive plan designed to link McCardell's personal investment with the interests of the stockholders. In particular, he was given a \$1,796,250 loan to purchase 60,000 shares of Harvester stock. Under the terms of this loan, he would not be obliged to pay back the loan if Harvester, under his management, reached parity in seven years. Parity was defined as the average of all competitors' profitability ratios (omitting firms that posted losses). The loan charged McCardell 6% which could be easily covered by stock dividends. Under this scheme, if McCardell achieved parity, he would benefit from having his loan forgiven and making additional money from higher stock prices (Loomis, 1980).

Overall, the preceding examples provide graphic testimony to the complexities of the CEO role that result from political and strategic activities. These examples also suggest that other contextual factors such as the relationship of the CEOs with the board of directors influence executive compensation decisions. Taken altogether, these observations suggest that the political and strategic activities of the CEO would provide a suitable context for understanding and explaining the weak linkage between rewards and performance that has characterized previous research.

Implications for Theory and Research

If we adopt a political perspective in assessing executive compensation (including a recognition of the role of the CEO as a political figurehead, political strategist, and participant in executive succession), several rather promising research implications for the study of CEO compensation emerge. In particular, we suggest four alternative explanations for the poor linkage between CEO rewards and performance that has characterized previous research efforts.

These four potential explanations are stated in terms of research propositions. As such, they are intended to guide future research on the topic. It is suggested that one fruitful way to proceed in this regard would be to initiate comparative studies of CEO performance-reward linkages that examined both the functional-rational perspective and the political perspective. In the functional-rational perspective, emphasis is placed on "hard" or "bottom-line" data; it is largely assumed that executive behavior represents purposeful choices of consistent actors. For example, it is assumed that since the CEO is the chief operating officer, he or she should be able to influence - and be held accountable for - financial performance. The political perspective, on the other hand, assumes that executive behavior reflects a diversity of goals reflecting both the pluralistic and political character of the organization. Hence, for example, the CEO as figurehead (e.g., Lee Iacocca) becomes an important aspect of the job. These differences are shown in Exhibit 1 and are discussed below. In doing so, we would clearly increase our understanding of the relative importance of political considerations in the study of executive compensation.

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Insert Exhibit 1 About Here

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Proposition 1. CEO rewards may be more a function of political rather than economic variables. As noted above, previous studies that have examined the determinants of CEO compensation have used economic related criteria (sales, profitability, strategy) as predictors of CEO rewards. We call this the functional-rational approach. While these variables can be justified for divisional general managers (and other managers in the lower echelons of the management hierarchy), they might not be as applicable to CEOs whose jobs tend to relate more to the political requirements of the corporation. Intuitively, it can be argued that political success will eventually be reflected in economic success. For instance, when Lee Iacocca was hired by Chrysler, there was an immediate increase in Chrysler's stock price. This was, in part, attributed to reports that Chrysler dealers and employees within the organization felt content with the change in leadership and the company's prospects under Iacocca's management (Pfeffer, 1981).

Unfortunately, a direct test of the relationship between Iacocca's reward and performance would obscure this particular context. In 1978 when he was hired, Iacocca received only \$60,622 in salary and bonus. He did receive a \$1.5 million recruitment bonus from Chrysler to be paid in 1979 and 1980 and approximately \$400,000 for the settlement of matters relating to his termination at Ford (Annual Survey of Executive Compensation, Business Week, 1980). With the salary reduction program in effect, however, he received a total of only \$1 per year for 1980 and 1981. Meanwhile, it is commonly acknowledged that he was instrumental in a bailout deal with Congress and successfully negotiating a labor-cost advantage contract with the United Auto Workers. When viewed against Chrysler's continuing losses through 1980 alone, Iacocca's political contributions would be seriously understated.

Therefore, future research should be directed at developing political as well as economic factors that might account for variations in executive compensation. Traditional economic-related criteria of success such as profitability and sales maximization can be logically linked to special incentive programs such as performance achievement plans, but do not adequately reflect the political skills of the CEO that may be crucial in accomplishing economic objectives in the long run. Political skills and contributions of CEOs are difficult to evaluate in quantitative terms because they are seldom clear or obvious. One approach would be to use attributions of political success by selected persons who are familiar with the CEO as a surrogate measure of political skill. In the case of Iacocca, such a measure would include attributions by persons inside and outside of Chrysler on Iacocca's effectiveness in dealing with Congress and the UAW. Reputational measures, however, are subject to various types of biases (Pfeffer, 1981). Clearly, this is one area that needs more serious empirical attention.

Parenthetically, it can be noted here that it is important to differentiate between CEO political skills that can be functionally related to a firm's long-range performance, and political qualifications that are serendipitously related to events surrounding executive succession. Iacocca's charm and charisma are important traits for managing Chrysler's present problems and a case can be made that these traits are related to the improvement of Chrysler's financial position in the future. If, on the other hand, a person becomes CEO and is rewarded with a handsome bonus primarily because he or she happens to be the "compromise" candidate by two competing interests, then the justification of any huge bonus would be difficult, if so demanded by stockholders and the general public.

Proposition 2. Changes in CEO rewards are time-related and often difficult to quantify. One issue that has not been as extensively examined in prior studies of CEO compensation is whether bonuses represent rewards for past actions or are made as an inducement for future contribution (Prasad, 1974). This raises the issue of time dimensionality, or the appropriate time frame in which to examine CEO performance-reward relationships.

Top executives are formally rewarded in terms of base salaries, bonuses, stock options, stock appreciation rights (SARs), performance achievement plans, and restricted stock options. Stock options, stock appreciation rights, and restricted stock options involve compensation that can be exercised within specified and nonspecified time periods. It is difficult, therefore, to logically relate these options with executive performance at any specified time period. Performance achievement plans (i.e., cash awards or shares that are earned for the achievement of predetermined financial targets) provide one exception, but such plans are still formative and constitute only a small fraction of CEO pay (Annual Survey of Executive Compensation, Business Week, 1978).

Previous research on CEO compensation adds little to our understanding of which time frame to employ. In general, there is evidence from time-lagged regressions utilizing one-to-two year differentials (Lewellen and Huntsman, 1972) that size (sales volume) and, to a lesser extent, profitability are significant predictors of CEO bonus and salary. The inclusion of political variables would tend to further complicate the question of what time frame to use as political transactions are not always compatible with time-period evaluations. For example, the success or failure of lobbying efforts by the automobile industry to obtain tariff concessions from Congress cannot be

directly tied to specific years for evaluation. Even so, its recognition is essential if we are to further our understanding of this important issue.

Future research and theory development should therefore closely examine the appropriateness of time frames selected for study. One procedure would be the use of longitudinal case studies in which the specific context by which rewards are associated with overall CEO performance can be more directly examined.

Proposition 3. Studies of CEO compensation ignore important intangible features of the job. Most studies of CEO compensation focus on formal reward structures (e.g., salary bonus, stock options, etc.) but place little attention on intrinsic rewards and perquisites. A comprehensive examination of this subject would include such variables. For instance, there is at least anecdotal evidence that executives take some jobs as a springboard to even more prestigious and challenging jobs (Rowan, 1981), and that they might accept some jobs either for the peace and tranquility or for the sense of challenge (Roche, 1975). The study of both the formal and informal reward structure of CEOs would provide more latitude in explaining the gaps between CEO compensation and performance.

Essentially such a study would focus on what CEOs consider to be significant outcomes resulting from their performance. With the increased paychecks of CEOs, it is difficult to argue that money is not a major influence on motivation. However, the magnitude of an executive's compensation can also represent prestige and recognition from peer groups. Hence, it is suggested that future research be directed at developing a more comprehensive typology of the rewards that are made in recognition of CEOs' accomplishments (cf. Kerr and Snow, 1981).

Proposition 4. CEO rewards might be better understood in the context of the CEO's relationship with the board of directors. Cross-sectional studies of the relationship between CEO compensation and performance neglect the context of the CEO's relationship with the board of directors. It is the board of directors that has the formal authority to hire and fire CEOs as well as decide on how much compensation ought to be paid. As in the case of International Telephone and Telegraph (ITT) Company, the Chairman of the Board (who may also be the CEO of the company) may select some members of the board of directors. There are a number of ways, therefore, that resulting decisions on CEO compensation might not result from CEO performance, as would be predicted from motivational and normative decision-making theories. As members of the board of directors might be sympathetic with the CEO's goals and programs, they might not be entirely unbiased in evaluating his or her performance. After all, to avoid giving a bonus would be an acknowledgment by the board that it might have selected the wrong person. Moreover, if CEO compensation is to impart an important symbolic message to the general public that a good job is being done, the board may elect to perpetuate this "myth" by giving a nice bonus even if such is not warranted in terms of company performance.

This practice is bound to be exacerbated as one considers the difficulties in hiring good CEOs. Meyers (1980) maintains that retaining the best executive talent will become a major corporate problem in the near future. He anticipates that the next decade will be characterized by increasing executive mobility as a result of: (1) greater demand for the fewer forty-to-sixty year old executives available and (2) increasing pressures that will restrict salaries, bonuses, and other management prerogatives. Con-

sider as one example, the turnover of executives at Pillsbury (Rowan, 1981). In 1980, the company experienced its fifth top executive turnover in ten years when Vice Chairman Thomas Wyman left to become president of CBS. Chief financial officer Walter Scott also left to become president of Investors Diversified Services, and Donald Smith, a Pillsbury Vice President, left to become president of Pepsico's food service division. As the market for top executive talent becomes more competitive, we would expect the board of directors to attempt to retain executive talent even if the CEO's performance might fall short of expectation. It is, therefore, not too surprising that firms change their leadership during times of crisis, or when it becomes painfully evident that the strategy associated with the outgoing CEO is no longer tenable (Starbuck and Hedberg, 1977; Starbuck, Greve, and Hedberg, 1978).

These observations suggest that future research direct closer attention to the role of the board of directors in determining CEO compensation, particularly in relation to the uncertainties of the CEO or top executive market. Summarizing some future research directions for board of directors, Schendel and Hofer (1979: 518) question whether boards in large well-established companies are captive management until some crisis emerges that requires them to challenge managerial leadership. If such is true, Schendel and Hofer also ask what might be done to establish the board's independence when crises are not present. One key towards unlocking these difficult questions would be to carefully examine how such interdependence is reflected in decisions involving CEO compensation.

Implications for Management

For about a decade, there have been numerous proposals that specify how top executive rewards might be better linked with performance (Murthy and Salter, 1975). Directed at both CEOs and divisional general managers (also referred to as top executives), these proposals generally attempt to relate particular strategic goals with different types of executive compensation (Dearden, 1972; Salter, 1973; Stata and Maidique, 1980; Kerr and Snow, 1980).

Our examination of the CEO compensation issue highlights several design considerations that explicitly recognize the political role and responsibilities of the CEO, and complements current efforts to improve the practice of CEO compensation. In particular, the following implications for managers concerned with CEO compensation are suggested:

1. At times, it might be appropriate to decouple rewards and performance.

The role of the divisional general manager, toward which various proposals have been directed, differs from the CEO office in fundamental ways. The divisional manager acts to meet predetermined goals, oftentimes profitability, and develops boundary transactions that are needed to accomplish these goals. As such, bonuses at the divisional level are generally based on division profits (ROI), profit improvement, profits compared with the company's or division's industry, or the achievement of the profit plan (Rappaport, 1978). Even in highly diversified organizations in which divisional managers are fairly autonomous, the uniformity of direction is somewhat assured by linking divisional bonus in part to overall corporate profits (Pitts, 1974). The political activities of divisional managers as exemplified in interdivisional transactions can be accommodated within the company's reward structure (Murthy and Salter, 1975).

The role of the CEO, on the other hand, encompasses other boundary transactions that principally relate to the enhancement of the company's image over time. In effect, attempts to strongly couple CEO bonus, for example, to ROI or other factors resembling those of the divisional general manager may prove to be illusory. At times, in fact, it might even be functional to loosely couple or even decouple rewards from performance to accommodate political activities of the CEO that are in the best interests of the company but are difficult to tie down to profitability measures in a given time period. Some examples of decoupling efforts would be the use of long-term goals as surrogates for political success, the extension of the time period in which CEOs are to be evaluated for long-term strategic efforts, and a more active role of board of directors in the planning and monitoring of CEO activities.

2. Long-term strategic goals as a surrogate for political success should be used in conjunction with profitability measures. Since businesses are subjected to quarterly evaluations by Wall Street, it is not likely that the present focus on profitability as a measure of performance will change substantially. It is possible, however, to emphasize the use of long-run strategic goals to complement short-run profitability measures. This is implicitly recognized in present efforts that call for an extended CEO evaluation period of up to 3-5 years (Rappaport, 1978). In a broad sense, the accomplishment of long-term strategic goals would validate the success the CEO might have in his or her interorganizational and political transactions. The involvement of the board of directors in this effort (Murthy and Salter, 1975) would also make this specific practice more effective.

3. The formalization of CEO compensation into a bonus formula may be tenable within a political context. Several incentive programs are aimed at formalizing executive compensation through some form of bonus formula. While this is possible with divisional general managers, it is difficult for CEOs since some aspects of their jobs are difficult to quantify or to relate to specific years. A more realistic alternative would be to more actively involve the board of directors in the planning and monitoring of CEO activities (Murthy and Salter, 1975). On a somewhat wider scale, the use of outside review boards and panels who would be involved in appraisal and compensation decisions can also be adopted. In any event, it is important to properly inform stockholders of such evaluations.

Conclusion

With the new Security and Exchange requirements for financial disclosure, the issue of CEO compensation is likely to become more controversial in the future. The lack of consistency between CEO compensation and performance has brought about many disquieting questions from the stockholders and the general public. In contrast to rational models that have characterized most previous studies, this paper suggests a political perspective to examine why such a weak performance-reward linkage exists and how future incentive programs might be redesigned to accommodate this perspective. Implications are suggested both for future research and for management practice. In all, it is hoped that the arguments advanced here will guide future research and practice by delineating more clearly the need to recognize the role of politics in executive behavior and CEO reward practices.

Exhibit 1 - A Framework for Analyzing Executive Compensation

Perspectives on Executive Behavior	(1) Basis of Reward Allocation	(2) Timing of Evaluation and Rewards	(3) Nature of Rewards	(4) Contextual Factors of Evaluation
<p>● <u>Functional-Rational</u></p> <p>Focus on bottom-line results; assumes purposeful choices of consistent actors</p>	<p>Emphasizes short-term and long-term financial performance (e.g., return on investment, net profits, successful acquisitions)</p>	<p>Typically considers CEO performance over 1 to 3 years as it relates to financial position of firm</p>	<p>Focuses on monetary rewards (e.g., salary, bonuses, stock options)</p>	<p>Focuses on compensation practices by type of industry or firm and by size of firm</p>
<p>● <u>Political</u></p> <p>Focus on political behavior; assumes behavior reflects a diversity of goals based on pluralistic and political character of organization</p>	<p>Recognizes CEO's role as symbolic and political figurehead and effectiveness of CEO in using political process to facilitate organizational goals</p>	<p>Necessitates a more ambiguous time frame; looks for trends in performance based on political activity of CEO as it bears on financial performance</p>	<p>Focuses on both extrinsic monetary rewards and intrinsic rewards (e.g., prestige, recognition, challenge)</p>	<p>Recognizes industry and firm context, but also considers nature of relationship between CEO and his or her evaluators (usually the board of directors)</p>

References

- Allison, G. T., Essence of Decision. Boston, Mass.: Little, Brown and Company, 1971.
- Annual Survey of Executive Compensation. Business Week, 2534, 1978, 66-90.
- Annual Survey of Executive Compensation. Business Week, 2540, 1980, 56-59.
- Baumol, W. J. Business Behavior, Value and Growth. New York, N. Y.: Harcourt, Brace and World, 1967.
- Berg, N. A. What's different about conglomerate management? Harvard Business Review, 1969. 57, 103-111.
- Berg, N. A. Corporate role in diversified companies. In B. Taylor and MacMillen, K. (Eds.), Business Policy: Teaching and Research. New York, N. Y.: Halstead Press, 1973, 298-347.
- Carlson, R. O. Executive Succession and Organizational Change. Danville, Illinois: Interstate Printers and Publishers, 1962.
- Ciscel, D. H. and T. M. Carroll. The determinants of executive salaries: An econometric survey. Review of Economics and Statistics, 1980, 62, 7-13.
- Cyert, R. and March, J. A Behavioral Theory of the Firm. Englewood Cliffs, New Jersey: Prentice-Hall, 1963.
- Dearden, J. How to make incentive plans work. Harvard Business Review, 50 (4), 1972, 117-124.

Deckop, J. R. and Mahoney, T. A. The economics of executive compensation.

Paper presented at the 42nd National Academy of Management Meeting,
New York City, August, 1982.

Helmick, D. L. and Brown, W. B. Successor type and organizational change
in the corporate enterprise. Administrative Science Quarterly, 1972,
17, 371-381.

Kerr, J. and Snow, C. C. Corporate strategies and rewards: A conceptual
framework. Paper presented at the 40th National Academy of Management
Meetings, Detroit, Michigan, 1980.

Kraus, D. The 'devaluation' of the american executive. Harvard Business
Review, 1976, 54 (3), 84-94.

Lawler, E. E. Motivation in Work Organizations. Monterey, CA: Brooks-
Cole, 1973.

Lewellen, W. and Huntsman, B. Managerial pay and corporate performance.
American Economic Review, 1970, 60, 710-720.

Loomis, C. Archie McCardell's Absolution. Fortune, 1980, 102 (12), 85-94.

Loomis, C. The madness of executive compensation. Fortune, 1982, 106 (1), 42-52.

McGuire, J. W., Chin, J. S. Y., and Elbing, A. O. Executive incomes, sales,
and profits. American Economic Review, 1962, 52, 753-761.

Meyers, K. A. Why companies lose their best people - And what to do about
it. Business Horizons, 1980, 3, 42-45.

- Mintzberg, H. A new look at the chief executive's job. Organizational Dynamics, 1973, 1 (3), 20-30.
- Morrison, A. Those executive bailout deals. Fortune, 1982, 106 (12), 82-87.
- Murthy, K. R. and Salter, M. Should CEO pay be linked to results? Harvard Business Review, 1975, 53 (3), 66-73.
- Opsahl, R. and Dunnette, M. The role of financial compensation in industrial motivation. In W. E. Scott, Jr. and Cummings, L. L. (Eds.), Readings in Organizational Behavior and Human Performance. Homewood, Illinois: Richard D. Irwin, Inc., 1973, 350-371.
- Pfeffer, J. Size and composition of corporate board of directors: The organization and its environment. Administrative Science Quarterly, 1972, 17, 218-228.
- Pfeffer, J. Cooptation and the composition of electrical utility boards of directors. Pacific Sociological Review, 1974, 17, 333-363.
- Pfeffer, J. Power in Organizations. Marshfield, Massachusetts: Pitman Publishing Co., 1981.
- Pitts, R. A. Incentive compensation and organizational design. Personnel Journal, 1974, 53, 338-348.
- Pondy, L. Leadership is a Language Game. In Morgan W. McCall, Jr., and Michael Lombardo (Eds.), Leadership: Where Else Can We Go? Durham, NC: Duke University Press, 1978, 115-121.

Prasad, S. B. Top management compensation and corporate performance.

Academy of Management Journal, 1974, 17, 554-558.

Rappaport, A. Executive incentives vs. corporate growth. Harvard Business Review, 1978, 56 (4), 81-88.

Roberts, D. R. Executive Compensation. Glencoe, Ill.: Free Press, 1959.

Roche, G. Compensation and the mobile executive. Harvard Business Review, 1975, 53 (6), 53-62.

Rowan, R. and Moore, T. Behind the lines in the Bendix war. Fortune, 1982, 106 (8), 156-163.

Rumelt, R. Strategy, Structure, and Economic Performance. Boston, Mass.: Harvard Business School, 1974.

Salter, M. Tailor incentive compensation to strategy. Harvard Business Review, 51 (2), 1973, 94-102.

Schendel, D. and Hofer, C. Strategic Management. Boston, Mass.: Little, Brown, and Company, 1979.

Smyth, D. J., Boyes, W. J., and Peseau, D. E. Size, Growth, Profits, and Executive Compensation in the Large Corporation. New York, N. Y.:

Starbuck, W., Greven, A., and Hedberg, B. L. T. Responding to crises. Journal of Business Administration, 1978, 9, 111-137.

Stata, R. and Maidique, M. A. Bonus system for a balanced strategy. Harvard Business Review, 1980, 58 (6), 156-163.

Steers, R. M. and Porter, L. W. Motivation and Work Behavior. New York, N. Y.: McGraw-Hill, 1983.

Stonich, P. J. Using rewards in implementing strategy. Strategic Management Journal, 1981, 2, 345-352.

Wall Street Journal: "Advising William Agee in Bendix-Martin Marietta-United Technologies-Allied Corporation Debacle." September 24, 1982.

Wallace, M. J. Impact of Type of Control and Industrial Concentration on Size and Profitability in Determination of Executive Income. Unpublished Ph.D. Dissertation, University of Minnesota, 1973.

Weick, K. Cognitive processes in organization. In B. M. Staw (Ed.), Research in Organizational Behavior. Vol. 1. Greenwich, CT: JAI Press, 1979, 41-74.

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